WHAT IS CLAIMED IS:

1. A method of switching a source terminated driver having a data input coupled to a data signal, an enable input coupled to an enable signal, and an output coupled to a proximal end of a transmission line into a high impedance state following transmission of a signal on the transmission line having a high impedance at a distal end of the transmission line comprising the steps of:
   switching the enable signal to a first enable level to cause the driver to drive the data input as a transmission line signal at the proximal end of the transmission line;
   switching the enable signal to a second enable level, suitable for switching the driver to the high impedance state, subsequent to the time the transmission line signal started;
   detecting when the reflection of the transmission line signal returns to the proximal end of the transmission line; and
   switching the driver to a high impedance state, responsive to the detection, if the enable signal has been switched to the second enable level.
2. The method of claim 1, wherein the step of detecting comprises the steps of:
   sensing a current driven by the driver; and
   asserting a disable signal when the current driven by the driver falls below a predetermined level.
3. The method of claim 2, wherein the step of sensing a current driven by the driver comprises the step of sensing a voltage across a resistive element through which current driven to the transmission line flows.
4. The method of claim 1, wherein the step of detecting comprises the steps of:
   sensing a voltage at the proximal end of the transmission line;
   asserting a first disable signal when a logic "1" is being driven and the voltage at the proximal end of the transmission line rises above a first reference voltage; and
   asserting a second disable signal when a logic "0" is being driven and the voltage at the proximal end of the transmission line falls below a second reference voltage.

5. The method of claim 4, wherein the step of sensing a voltage at the proximal end of the transmission line comprises the step of coupling the voltage at the proximal end of the transmission line to a logic gate designed to have a suitable input voltage threshold.
6. The method of claim 4, wherein the step of sensing a voltage at the proximal end of the transmission line comprises the step of coupling the voltage at the proximal end of the transmission line to a first input of a voltage comparator, a second input of the voltage comparator coupled to a reference voltage.
7. The method of claim 1, wherein the step of switching the driver to a high impedance state comprises the steps of:

   setting a set dominant latch by switching the enable signal to the first enable level;

   switching the enable signal to the second enable level; and

   using the detection of the reflection to assert a reset signal on a reset input of the set dominant latch.

8. A bidirectional driver/receiver comprising

   a driver block capable of driving a transmission line, having a data input, an enable input, and a driver block output having an impedance similar to the characteristic impedance of the transmission line, the driver block further comprising:

   a source terminated driver having a driver data input coupled to the data input, a driver enable input, and an output coupled to the driver block output;

   a sensor capable of detecting when a reflection of a signal sent by the driver arrives at the driver; and

   an enable logic coupled to the sensor, to the enable input, and to the driver enable input, capable of switching the driver to a high impedance state;

   wherein the driver, subsequent to driving a signal on the transmission line, is switched by the enable logic to a high impedance state upon detection by the sensor that a reflection of the signal sent by the driver has arrived at the driver, if the enable input has been switched to a nonenabling logic level.

9. The bidirectional driver/receiver of claim 8, the sensor comprising:

   a logic block having an input voltage threshold suitable for detection of the arrival of the reflection.

10. The bidirectional driver/receiver of claim 8, the sensor comprising:
a voltage reference, the voltage reference equal to a predetermined voltage level suitable to be interpreted as the returned reflected signal; and
a comparator having a first input coupled to an output of the driver, and a second input coupled to the voltage reference, and an output coupled to the enable logic.
11. The bidirectional driver/receiver of claim 8, the enable logic comprising:
a set-dominant latch having a set input coupled to the enable input, a reset input, and an output coupled to the driver enable input of the driver; and
one or more logic blocks coupled to the sensor and the driver enable input suitable to assert a reset signal at the reset input when the signal at the driver enable input is asserted and the sensor has detected that the reflection of the signal sent by the driver has returned to the driver.
12. An electronic system comprising:
a first electronic unit;
a second electronic unit;
a bidirectional signaling bus having a plurality of signaling conductors coupled to the first electronic unit and to the second electronic unit;
a first plurality of bidirectional driver/receivers in the first electronic unit having a source terminated driver in each of the bidirectional driver/receivers, a bidirectional driver/receiver in the first plurality of bidirectional driver/receivers coupled to a signaling conductor in the bidirectional signaling bus;
a second plurality of bidirectional driver/receivers in the second electronic unit having a source terminated driver in each of the bidirectional driver/receivers, a bidirectional driver/receiver in the second plurality of bidirectional drive/receivers coupled to a signaling conductor in the bidirectional signaling bus;
a first strobe signaling conductor coupled to the first electronic unit and to the second electronic unit over which a first voltage transition is driven by the first electronic unit at substantially the same time at which the first electronic unit drives a first data onto the signaling bus; and

a second strobe signaling conductor coupled to the first electronic unit and to the second electronic unit over which a second voltage transition is driven by the second electronic unit at substantially the same time at which the second electronic unit drives a second data onto the signaling bus;

wherein the first electronic unit drives the first voltage transition on the first strobe signaling conductor and the first data on the signaling bus; the second electronic unit, in response to receipt of the first voltage transition, latches the first data, drives the second voltage transition on the second strobe signaling conductor and drives the second data onto the signaling bus.

13. The electronic system of claim 12 wherein each driver in the first plurality of bidirectional driver/receivers and each driver in the second plurality of bidirectional driver/receivers are capable of switching to a high impedance state upon receipt of a reflection of a signal driven by that driver.

14. The electronic system of claim 12, wherein each driver in the first plurality of bidirectional driver/receivers switches to a high impedance state upon receipt of a reflection of a signal driven by that driver only if the first electronic unit has relinquished control of the signaling bus.